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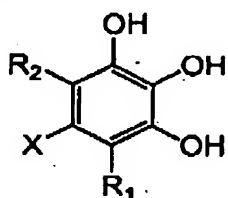
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**WHAT IS CLAIMED IS:**

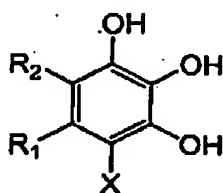
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1. A method of treating a mammal suffering from amyloidosis or a disease characterized by  $\alpha$ -synuclein fibril formation, comprising administration to the mammal of a therapeutically effective amount of an isolated pure compound selected from the group consisting of the compounds of formula A, formula B, formula C, formula D, and formula E:

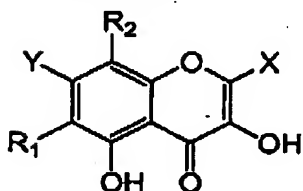
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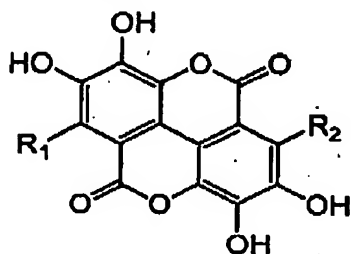
Formula A



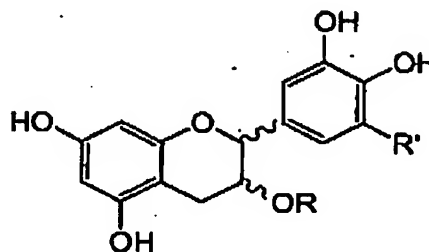
Formula B



Formula C



Formula D



Formula E

where:

- 15 R is selected from the group consisting of hydrogen, 2,3-dihydroxybenzoyl, 3,4-dihydroxybenzoyl, 2,3,4-trihydroxybenzoyl, and 3,4,5-trihydroxybenzoyl;  
 R' is hydrogen or OH;  
 R<sub>1</sub> and R<sub>2</sub> are independently selected from hydrogen and non-interfering substituents;

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X is selected from hydrogen and the group consisting of

- (a) hydroxy, amino, C<sub>1-6</sub> alkylamino, di(C<sub>1-6</sub> alkyl)amino, and cycloamino,
- (b) C<sub>1-22</sub> alkyl, C<sub>1-22</sub> alkoxy, C<sub>1-22</sub> alkylthio, and C<sub>1-22</sub> alkylcarboxyl, each optionally substituted with 1 to 5 moieties selected from the group consisting of halogen, hydroxy, mercapto, amino, nitro, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkylthio, and C<sub>1-6</sub> alkylcarboxyl,
- (c) aromatic and heteroaromatic groups substituted with 2 or 3 adjacent hydroxy groups, and optionally substituted with 1 to 5 non-interfering substituents,
- (d) sugars, optionally substituted with one or more anionic groups selected from sulfate, phosphate, phosphonate, carboxylate, and sulfonate groups,
- (e) peptides and peptide derivatives, and
- (f) -C(O)R<sub>3</sub> and -C(O)OR<sub>3</sub> (where R<sub>3</sub> is selected from the group consisting of (a) through (e) above); and

- Y is hydrogen, hydroxy, C<sub>1-6</sub> alkoxy, benzyloxy (where the phenyl group is optionally substituted with 1 to 3 substituents selected from halo and C<sub>1-6</sub> alkyl), or —OSO<sub>2</sub>R<sub>4</sub> (where R<sub>4</sub> is C<sub>1-6</sub> alkyl or phenyl optionally substituted with 1 to 3 substituents selected from halo and C<sub>1-6</sub> alkyl);

- and the group of compounds consisting of acacetin, actinorhodine, alizarin, alizarin blue, alizarin orange, alizarinsulfonic acid, alkannin, anthragallol, anthralin, anthrarobin, anthrurufin, apigenin, apigetrin, apiose, baicalein, baptigenin, 1,2,4-benzenetriol, bostrycoidin, carbidopa, carminic acid, carubicin, cellobiose, centaurein, chloranilic acid, chondrosine, chromotrope 2B, chromotropic acid, chrysamminic acid, chrysarobin, chrysin, chrysophanic acid, cichorin, citrazinic acid, citromycetin, collinomycin, curvularin, cyanidin, cyanidin 3-glucoside, cyanidin 3-rhamnoglucoside, cyanidin 3,5-diglucoside, cyanidin 3-sophoroside, daphnetin, datiscetin, daunorubicin, delphinidin, deoxyepinephrine, diosmetin, diosmin, dioxethedrine, dopa, dopamine, doxorubicin, droxidopa, echinochrome A, embelin, emodin, ergoflavin, eriodictyol, esculetin, fenoldopam, fomecin A, fomecin B, fraxetin, fraxin, fredericamycin A, fumigatin, fusarubin, fuscine, fustin, galangin, gallein, gallocyanine, gardenin A, gardenin B, gardenin C, gardenin D, gardenin E, genistein, gentisin, granaticin, guamecycline, hematein,

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hydroxysophorobioside, hydroxysophoricoside, icariin, isoquercitrin, kaempferol, kermesic acid, laccaic acid A, laccaic acid B, laccaic acid C, laccaic acid D, leucocyanidin, luteolin, maclurin, menogaril, methylenedigallic acid, morin, oosporein, phenicin, phloroglucide, puberulic acid, puberulonic acid, purpurin, 5 purpurogallin, quercetagenin, quercimritrin, quinalizarin, quinic acid, resistomycin, rhamnetin, rhein, rhodizonic acid, rhodomycin A, rhodomycin B, robinin, ruberythric acid, rufigallol, rutin, scutellarein, tannic acid, tetroquinone, tiron, troxerutin, and tunichrome B1,

but excluding pyrogallol,

10 and the pharmaceutically acceptable salts thereof.

2. The method of Claim 1 where the amyloidosis is selected from the group of diseases consisting of Alzheimer's disease, Down's syndrome, hereditary cerebral 15 hemorrhage with amyloidosis of the Dutch type, the amyloidosis of chronic inflammation, the amyloidosis of malignancy and familial Mediterranean fever, the amyloidosis of multiple myeloma and B-cell dyscrasias, the amyloidosis of type II diabetes, the amyloidosis of the prion diseases, Creutzfeldt-Jakob disease, Gerstmann-Straussler syndrome, kuru, scrapie, the amyloidosis associated with long-term 20 hemodialysis, the amyloidosis associated with carpal tunnel syndrome, senile cardiac amyloidosis, familial amyloidotic polyneuropathy, and the amyloidosis associated with endocrine tumors.

25 3. The method of Claim 2 where the amyloidosis is Alzheimer's disease.

4. The drug method of Claim 1 where the  $\alpha$ -synuclein fibril formation is Lewy body disease or Parkinson's disease.

30 5. The method of Claim 1 where  $R_1$  and  $R_2$  are independently selected from the group consisting of hydrogen;  $C_{1-6}$  alkyl,  $C_{1-6}$  alkoxy, and  $C_{1-6}$  alkylthio (in each of which the alkyl group is optionally substituted with 1 to 5 halogen atoms); and halo.

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6. The method of Claim 1 where X is selected from hydrogen and the group consisting of
- (a) hydroxy, amino, C<sub>1-6</sub> alkylamino, di(C<sub>1-6</sub> alkyl)amino, and cycloamino,
  - (b) C<sub>1-22</sub> alkyl, C<sub>1-22</sub> alkoxy, C<sub>1-22</sub> alkylthio, and C<sub>1-22</sub> alkylcarboxyl, each optionally
  - 5 substituted with 1 to 5 moieties selected from the group consisting of halogen, hydroxy, mercapto, amino, nitro, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkylthio, and C<sub>1-6</sub> alkylcarboxyl,
  - (c) aromatic and heteroaromatic groups substituted with 2 or 3 adjacent hydroxy groups, and optionally substituted with 1 to 5 non-interfering substituents, and
  - (d) -C(O)R<sub>3</sub> and -C(O)OR<sub>3</sub> (where R<sub>3</sub> is selected from the group consisting of (a) through
  - 10 (c) above).
7. The method of Claim 1 where X is selected from hydrogen and the group consisting of hydroxy, amino, -C(O)R<sub>3</sub>, and -C(O)OR<sub>3</sub> (where R<sub>3</sub> is selected from hydroxy, amino, C<sub>1-6</sub> alkyl optionally substituted with 1 to 5 halogen atoms, and aromatic
- 15 and heteroaromatic groups substituted with 2 or 3 adjacent hydroxy groups and optionally substituted with 1 to 5 non-interfering substituents selected from halogen atoms and C<sub>1-6</sub> alkyl and C<sub>1-6</sub> alkoxy, each optionally substituted with 1 to 5 halogen atoms.
8. The method of Claim 1 where Y is selected from the group consisting of
- 20 hydrogen, hydroxy, C<sub>1-6</sub> alkoxy, and benzyloxy (where the phenyl group is optionally substituted with 1 to 3 substituents selected from halo and C<sub>1-6</sub> alkyl and C<sub>1-6</sub> alkoxy, each optionally substituted with 1 to 5 halogen atoms).
9. The method of Claim 1 where the compound is a compound of formula A or
- 25 formula B, or a pharmaceutically acceptable salt thereof.
10. The method of Claim 9 where the compound is selected from the group consisting of dibromogallic acid, digallic acid, ethyl gallate, exifone, fisetin, gallacetophenone, gallamide, gallic acid, α-glucogallin, β-glucogallin, 5-hydroxydopamine, and propyl
- 30 gallate, and the pharmaceutically acceptable salts thereof.

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11. The method of Claim 1 where the compound is a compound of formula C or a pharmaceutically acceptable salt thereof.
12. The method of Claim 1 where the compound is a compound of formula D or a pharmaceutically acceptable salt thereof.
13. The method of Claim 12 where the compound is ellagic acid or a pharmaceutically acceptable salt thereof.
14. The method of Claim 1 where the compound is a compound of formula E or a pharmaceutically acceptable salt thereof.
15. The method of Claim 14 where the compound is selected from the group consisting of catechin, epicatechin, gallic acid, epigallocatechin, and their gallate esters, and the pharmaceutically acceptable salts thereof.
16. The method of Claim 1 where the active ingredient is selected from group of compounds consisting of acacetin, actinorhodine, alizarin, alizarin blue, alizarin orange, alizarinsulfonic acid, alkannin, anthragallol, anthralin, anthrarobin, anthrarin, apigenin, apigetrin, apiose, baicalein, baptigenin, 1,2,4-benzenetriol, bostrycoidin, carbidopa, carminic acid, carubicin, cellobiose, centaurein, chloranilic acid, chondrosine, chromotrope 2B, chromotropic acid, chrysamminic acid, chrysarobin, chrysin, chrysophanic acid, cichoriin, citrazinic acid, citromycetin, collinomycin, curvularin, cyanidin, cyanidin 3-glucoside, cyanidin 3-rhamnoglucoside, cyanidin 3,5-diglucoside, cyanidin 3-sophoroside, daphnetin, datiscetin, daunorubicin, delphinidin, deoxyepinephrine, diosmetin, diosmin, dioxethedrine, dopa, dopamine, doxorubicin, droxidopa, echinochrome A, embelin, emodin, ergoflavin, eriodictyol, esculetin, fenoldopam, fomecin A, fomecin B, fraxetin, fraxin, fredericamycin A, fumigatin, fusarubin, fuscine, fustin, galangin, gallein, gallocyanine, gardenin A, gardenin B, gardenin C, gardenin D, gardenin E, genistein, gentisin, granaticin, guamecycline, hematein, hydroxysophorobioside, hydroxysophoric acid, icariin, isoquercitrin,

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kaempferol, kermesic acid, laccaic acid A, laccaic acid B, laccaic acid C, laccaic acid D, leucocyanidin, luteolin, maclurin, menogaril, methylenedigallic acid, morin, oosporein, phenicin, phloroglucide, puberulic acid, puberulonic acid, purpurin, purpurogallin, pyrocatechol, quercetagenin, quercimritrin, quinalizarin, quinic acid, resistomycin, 5 rhamnetin, rhein, rhodizonic acid, rhodomycin A, rhodomycin B, robinin, ruberythric acid, rufigallol, rutin, scutellarein, tannic acid, tetroquinone, tiron, troxerutin, and tunichrome B1, and the pharmaceutically acceptable salts thereof.

17. The method of Claim 1 where the compound is selected from 1,2,4-benzenetriol, 10 ellagic acid, ethyl gallate, exifone, gallamide, gallic acid, 5-hydroxydopamine, myricetin, phloroglucide, propyl gallate, quercetin, quinic acid, and tannic acid, and the pharmaceutically acceptable salts thereof.

18. The method of Claim 17 where the compound is selected from the group 15 consisting of myricetin and quercetin, and the pharmaceutically acceptable salts thereof.

19. Pharmaceutical composition adapted for treating a mammal suffering from amyloidosis or a disease characterized by  $\alpha$ -synuclein fibril formation, comprising a therapeutically effective amount of an isolated pure compound selected from the group 20 consisting of the compounds of formula A, formula B, formula C, formula D, and formula E: